

## **Background guide**

It gives us great pleasure to welcome you all to the real-time species survival game known as Startroopers. Survival is never an easy task to accomplish, considering the how fragile life is and the fact that life needs a suitable combination of ecosystem to survive. Here we are giving you a opportunity to colonize a new planet, with limited resources in your possession, and a bevy of factors that can play against you or in your favour .

Which team will take home the glory? Which team will prove that they have what it takes to be, Star Troopers?

### **Event Description**

A long time ago in a solar system far-far away called “Exlax”, 3 habitable planets were found in the “Goldilocks Zone” with each of them having its own unique planetary traits. We as a super-intelligent species mastered in the science of interplanetary colonization lets your team to have an opportunity to settle and sustain life on one of the 3 planets. We will provide your team with a fixed starting amount in inter -galactic currency with your team deciding the expenditure for the resources offered to you judiciously. On the basis of your team’s knowledge and skill along with the information given to you, decide your next step.

Space is an unpredictable territory, things unbeknownst to you can bring imbalance in your world. Watch out for such bumps along the way. May the force be with you!

### **Planet Description**

You have three astronomical object known to harbor life. Each team will be offered one of three types of planet present in the Goldilocks Zone of Exlax. Each planet consists of different composition of land, air and water. Planet’s gravity interacts with other objects in space, especially the Sun. We as super intelligent species will offer you a opportunity for terraforming your planet and also provide resources to make progress with your civilization.

### **Game Parameters**

#### **(a) Population**

population is all the organisms of the same group or species, which live in a particular geographical area, and have the capability of interbreeding. Here, population Increases every 5 years at a fixed rate. People need water, oxygen and land to survive.limited resources and a larger population puts pressures on the resources that do exist. So population of planet may get to halt by lack of any of the basic requirements of people. Population also increases and decreases with external factors such as vegetation , Industrialization. As we told you before, Space is an unpredictable territory so watch out as rate of population indirectly can come to a halt.

#### **(b) IQ per person**

This is the backbone of any planet. The higher the IQ, more rapid the growth of your planet. The rate of growth is not constant ,the rate of IQ/person will also increase as your IQ/person increases.The IQ/person increases every 5 year. As the IQ/person increases the population density will also increase.

For example , At an IQ/ person level of 12 you are able to habitat 2 people/Km sq , But At an IQ/person level of 23 you are able to habitat 3 people/ Km sq.

## **Winning Parameters: Population \* IQ**

### **Resources**

#### **Seed**

These are human population explosion pack that help you populate your planet. Each of the seeds consists of a fixed no. of people with each of the seeds having different Average IQ per person. The higher the IQ, more rapid is the growth of your planet. Accordingly, the price of the seed increases with increase in IQ level.

#### **Flora and Fauna**

Flora is the plant life occurring in a particular region or time, generally the naturally occurring or indigenous—native plant life. The corresponding term for animal life is fauna. It affects the population by increasing growth rate of population and It also increases the IQ/person growth rate

#### **Agriculture**

Agriculture is the process of producing food, feed, fiber and many other desired products by the cultivation of certain plants and the raising of domesticated animals. It affects the population by increasing growth rate of population and It also increases the IQ/person growth rate

#### **Industrialisation**

Industrialisation is the period of social and economic change that transforms a human group from an agrarian society into an industrial society. Rapid industrialisation in every society and every generation causes a period of joblessness and depression. During such periods, Increases IQ growth rate but also decreases the rate of growth.

#### **Mining**

Mining is the extraction of valuable minerals or other geological materials from the earth, usually from an ore body, lode, vein, seam, reef or placer deposit. It affects the IQ/person by increasing growth rate of IQ/person

#### **Interplanetary mining:**

Asteroid mining is the exploitation of raw materials from asteroids and other minor planets, including near-planet objects. To have interplanetary mining you must have mining unlocked before. It affects the population by increasing growth rate of population and It also increases the IQ/person growth rate

#### **Dyson Sphere**

A Dyson sphere is a hypothetical megastructure that completely encompasses a star and captures a large percentage of its power output. A dyson sphere is a device that is used by a Level II civilization to harness the power of its star. It will give your civilization a big boost both in terms population and IQ/person

**Remember :- You need a certain IQ / person level to unlock these resources**

## Background guide

### 1) Planet Description:

- i. Type A
  - (a) Farthest to sun
  - (b) Gravity is 6m/sec sq.
  - (c) Very small land region on the planet: 30 million km. sq. (3.3% of 600 million km. sq.)
  - (d) 17% O<sub>2</sub>
  - (e) Water: 16 billion gallons of fresh water
- ii. Type B
  - (a) In between planet A and C
  - (b) Gravity is 12 m/sec sq.
  - (c) Total surface is 800 million km. sq. among which land is 6.25% is 50 million km. sq.
  - (d) 12% o<sub>2</sub>
  - (e) Water: 15 billion gallons
- iii. Type C
  - (a) Closest to Sun
  - (b) Gravity is 9 m/sec sq.
  - (c) Total area is 700 million km. sq. of which land is 4.2% is 40 million km. sq.
  - (d) 15% o<sub>2</sub>
  - (e) Water: 13 billion gallons

### 2) Winning Parameters: Highest Population \* IQ

#### a) IQ/person

Period	IQ	People/km sq	crisis
0-15 min	0-10(0.004)	2	0-10 min: Seed , Flora and fauna 10-15 min: Agriculture/indusrtrialization
	10-20(0.004)	3	
	20-30(0.006)	4	
	30-40(0.008)	5	
	40-50(0.010)	6	
15-30 min	50-60(0.014)	7	15-30 min: trade -1
	60-70(0.018)	8	
30-45 min	70-80(0.020)	9	30-35 min: mining 35-45 min: Solar flare outbrust
	80-90(0.022)	10	
45-60 min	90-110(0.026)	12	45-50 min: Space ship 50-60 min: meteor strike
	110-130(0.030)	14	

60-75 min	130-155(0.032)	17	60-75 min: trade -2
	155-180(0.036)	20	
	180-205(0.038)	23	
75-90 min	205-240(0.040)	27	75-85min:Dyson sphere 85-90min: Water Virsusi
	240-280(0.044)	32	
	280-330(0.024)	40	

population increases by 50% per 30 min

flora and fauna :- IQ by 0.1.

Agriculture :- IQ by 0.1. IQ :- 32

Industrialization :- IQ by 0.1. IQ :- 44

Space-ship :-IQ by 0.2

Dyson Sphere :- IQ by 0.3

IQ \* Population /100